



OptoTech

SM 150 CNC-TC

Generator for Pre- and Fine Grinding of Spherical and Aspherical Lenses



The OptoTech precision grinding machine SM 150 CNC-TC is perfectly suited for flexible and universal production of spherical optical components. The SM 150 CNC-TC is the perfect complement to our SPK 150 CNC polishing machine, delivering a balanced cycle time for grinding and polishing. This combination forms a production line consisting of only two machines with no idle time while one machine waits for the other.



Technical data

	SM 150 CNC-TC
Application	Generator for Pre- and Fine Grinding of Spherical and Aspherical Lenses
Working Range Diameter	10 mm - 150 mm
Working Range Diameter (aspheres)	10 mm - 200 mm
Working Range Radius	10 mm to plano
Travel B	-55 ° - 55 °
Amount of Axes	3 (X, Z, B)
Control	Siemens Sinumerik 840 Digital Solution Line
Tool Spindle	Speed: 0 - 12000 rpm; Interface: HD 25
Workpiece Spindle	Speed: 0 - 2000 rpm; Interface: HD 25
Vacuum	-0.7 bar
Air Pressure Requirement	6 bar
Power Requirement (others on request)	6 kW / 400 V / 50 Hz
Dimensions	Width: 2000 mm, Height: 1990 mm, Depth: 1850 mm
Weight (approx.)	2450 Kg; Without loader
Disclaimer	All data are subject to change without notice. Please verify details with OptoTech.





Highlights

- The machine can be delivered as 3 or 4 spindle machine and offers maximum flexibility
- 3 CNC axes (X, Z, B); C-axis as an option
- 3 different versions available: TwinCut (Standard); DoubleTwo-3C; DoubleTwo-Invers
- Direct driven spindles for a better performance, smooth running and less vibrations
- Pivoting angle +/- 55° (+48°/-55° for version with automation)
- Coolant control
- LAN-Connection
- Preparation for filter exhausting device

System advantages

- Innovative 3C Technology (pre-, fine- and finest grinding with pellet tool) for even better surface qualities and reduced polishing cycle times up to 30-50%
- Direct driven spindles for a better performance, smooth running and less vibrations

Performance characteristics

Technologies:

- AST (Advanced Setup Technology, aka: Touch Setting)
- 3C-Processing (Finest-grinding with pellets; DoubleTwo version with integrated dressing spindle)
- Radius processing
- 3D-grinding for optimal utilization of the grinding tool
- Edge processing (diameter and chamfers)

Options

Machine Options:

- Machine versions TwinCut or DoubleTwo
- C-Axis
- Automation (Portal loader with disc magazine)
- Processing of complex edge geometries using OptoEdge
- Processing aspheres
- Remote control
- Upper measuring pin for center thickness and diameter
- KombiTool or KombiTool+ [\[link\]](#)

Additional Accessories (available as an option)

- Coolant tanks (with or without centrifuge)
- Chiller with coolant tank
- Filter exhausting device with coolant recirculation
- Vacuum device